

REMARKS

This paper is responsive to any paper(s) indicated above, and is responsive in any other manner indicated below.

STATEMENT OF SUBSTANCE

The 27 July 2006 examiner interview (by and between Examiner Tuan C. TO and the undersigned) is respectfully noted; in such interview, it was agreed by the Examiner that if the present RCE was filed with claim amendments, then the Examiner would not make a first action final. The Examiner is thanked for such interview, and for allowing Applicant to avoid the procedural/administrative delays associated with an after-final amendment and advisory action process.

During the examiner interview, it was further indicated orally by the Examiner that the present claim amendments appeared (subject to further search and consideration) to overcome the 112, 2nd para. concerns as well as the 103 rejections based upon the primary Endo et al. and secondary Shitamatsu et al. references. More particularly, any foregoing amendments may include amendments discussed during, or resultant from, the examiner interview, and the following includes a reiteration of discussions/arguments had during the examiner interview.

PENDING CLAIMS

Claims 1-6 and 8-17 were pending, under consideration and subjected to examination in the Office Action. Appropriate claims have been amended, canceled and/or added (without prejudice or disclaimer) in order to adjust a clarity and/or focus of Applicant's claimed invention. That is, such changes are unrelated to any

prior art or scope adjustment and are simply refocused claims in which Applicant is present interested. At entry of this paper, Claims 1-6 and 8-22 will be pending for further consideration and examination in the application.

REJECTION UNDER '112, 2ND PAR. OBIATED VIA CLAIM AMENDMENT

Claims 8 and 14 have been rejected under 35 USC '112, second paragraph, as being indefinite for the concerns listed within the "112" section on page 2 of the Office Action. Such claims have been carefully reviewed and carefully amended where appropriate in order to address the Office Action listed concerns. As the foregoing is believed to have addressed all '112 second paragraph concerns, reconsideration and withdrawal of the '112 second paragraph rejection are respectfully requested.

REJECTION(S) UNDER 35 USC '103

All 35 USC '103 rejections are respectfully traversed. However, such rejections have been rendered obsolete by the present clarifying amendments to Applicant's claims, and accordingly, traversal arguments are not appropriate at this time. However, Applicant respectfully submits the following to preclude renewal of any such rejections against Applicant's clarified claims.

All descriptions of Applicant's disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated hereat by reference. Further, all Office Action statements regarding the prior art rejections are

respectfully traversed. As additional arguments, Applicant respectfully submits the following.

In order to properly support a §103 obviousness-type rejection, the reference not only must suggest the claimed features, but also must contain the motivation for modifying the art to arrive at an approximation of the claimed features. However, the cited art does not adequately support a §103 obviousness-type rejection because it does not, at minimum, disclose (or suggest) the following limitations of Applicant's clarified claims.

Applicant's disclosed and claimed invention is directed to car navigation system arrangements which improve an ease of use/understanding and improve safety by a user. More particularly, a car navigation system may be configured to display at least one of two-dimensional maps, three-dimensional maps and bird's-eye-view maps, from mapping information provided from a database. The present inventors found that such two-dimensional maps, three-dimensional maps and bird's-eye-view maps may contain too much information, such that, when a user (e.g., a driver) glances at the map display momentarily (i.e., for limited brief seconds) while driving, there may be insufficient time for the driver to completely digest/comprehend the complex two-dimensional maps, three-dimensional maps and bird's-eye-view maps. The driver's choices are to continue driving with an incomplete understanding, or put driving safety at risk by glancing at the map (rather than the road) for a longer period.

Applicant's disclosed and claimed invention improves ease of use/understanding and safety, by incorporating a map summarizing unit configured to generate a summary road map having a reduced amount of

information than the at least one of two-dimensional maps, three-dimensional maps and bird's-eye-view maps, and a display unit configured to display the summary road map together with a mark indicative of the vehicle position. All of Applicant's independent claims (i.e., independent claims 1, 3 and 9) contain such summary map features/limitations. Ones of Applicant's drawing FIGS. are helpful in understanding of Applicant's summary map features/limitations.

More particularly, Applicant's FIG. 8 (reproduced herewith) shows a display of a (complex) two-dimensional map, showing three alternative routes between a present position and a target position. (Note that the "two-dimensional" button at the bottom of such display is highlighted.)

FIG.8

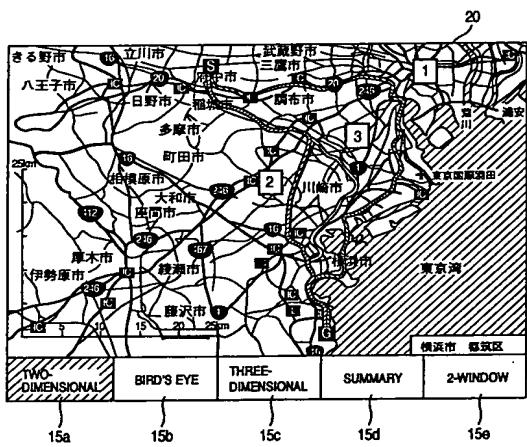
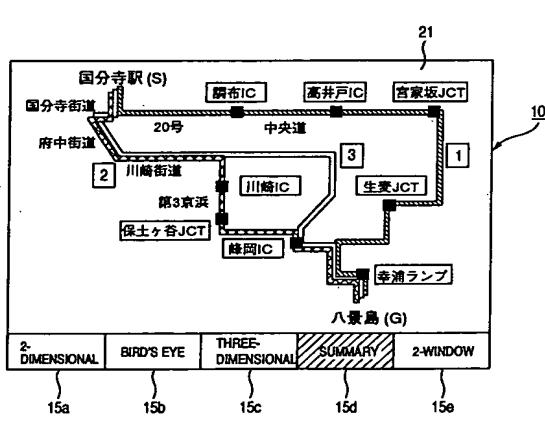


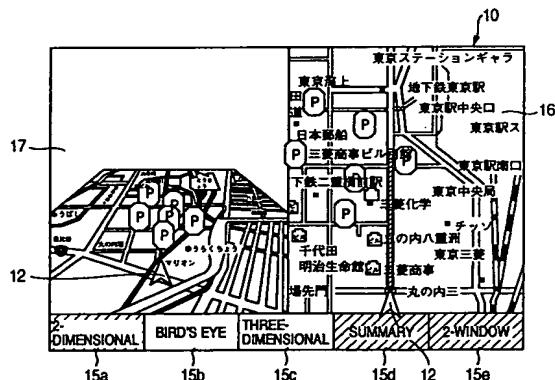
FIG.9



In contrast, Applicant's FIG. 9 (reproduced herewith) shows a display of a (simplistic) summary map, showing the three alternative routes between a present position and a target position in a more simplified form with a reduced amount of map information. (Note that the "summary" button at the bottom of such display is highlighted.)

Each of Applicant's independent claims adds additional features to the basic summary feature. More particularly, as to Claim 1, an important feature of claim 1 is to search for land mark facilities (e.g., parking lots, stores) responsive to a facilities request in a land mark database, and to generate a summary road map by applying a summarizing operation over a main road including a running route and the searched land mark. This is supported by the description in paragraphs [0013] and [0069] in US Patent Application Publication No.2004-0236507 of this application. For example, when a driver hopes to get a parking area, the car navigation system performs a summarizing processing to display a small (i.e., geographically small) parking area. In the present invention, land mark facilities determined by a user's facilities request is searched, and the summarizing operation is applied to the searched land marks. As a result, even if the searched land marks includes a small parking area, such a small parking area can be displayed (refer to paragraph (00693 of the US Publication), e.g., by inserting an icon onto the map. Applicant's FIG. 5B for example, illustrates (in dual windows), a bird's-eye view and a summary view having parking or "P" landmark facilities highlighted.

FIG.5B



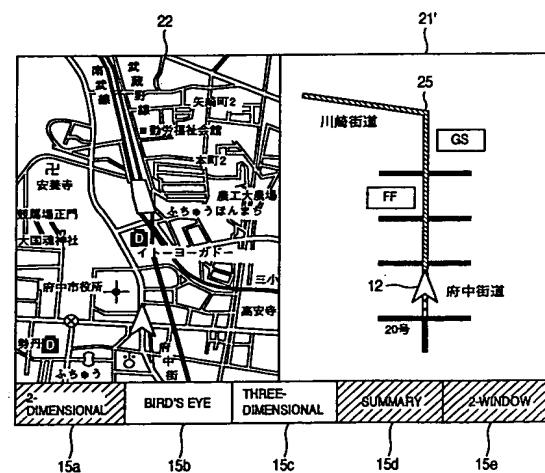
As to Claim 3, an important feature of Claim 3 is to search a route between a vehicle position or a departure position and a target position, to generate a summary road map by simplifying the route with highlighted lines and to display the summary road map. This is supported by the description in paragraphs [0015], [0016], [0092]

and Fig.9 of the US Publication No.'507. Accordingly, a desired route between the departure or the vehicle position and the target position is clearly indicated by a simplified highlighted line as shown in Applicant's Fig. 9 (shown previously, above) and therefore the driver can readily recognize the entire route (refer to paragraphs [0091], [0092] and [0171] the US Publication).

As to Claim 9, an important feature of Claim 9 is to generate a summary road map from the current vehicle position to a next turning corner on the searched running route, and to display the summary road map from the current vehicle position to the next turning corner with a mark of the current vehicle position. This is supported by paragraphs [0099], [0101], [0107] and Fig.12 of the US Publication '507. In the present invention, not only an intersection, but also a route from the present vehicle position to a next intersection can be displayed, and a driver can easily know the state of the running route up to the next intersection (refer to paragraphs [0099] and [0172]). Accordingly,

the visual understanding of the user is improved, and the user can pass through a main intersection smoothly (refer to paragraphs [0101], [0109], [0121] and others). Applicant's FIG. 5B for example, illustrates (in dual windows), a two-dimensional view and a summary view of an impending intersection.

FIG.12



Dependent claims also add features. As to Claim 4, an important feature is to search for another route between the vehicle position or the departure position and the target position, and to display the searched another route by differing specialized (e.g., simplified broken) lines. This is supported in paragraph [0016] and Fig.9. As to claims 19 and 21 (and independent claim 9), such recite that the display unit is configured to display the summary road map automatically responsive to a predetermined change in positioning of the vehicle on the at least one of two-dimensional maps, three-dimensional maps and bird's-eye-view maps. Further, claims 12, 18, 20 and 22 recite that the map summarizing unit is configured to at least one of linearize and orthogonalize roads to generate the summary road map (FIGS. 9 and 12 (illustrated previously, above) illustrate summary maps having roads linearized and orthogonalized).

Turning now to rebuttal of the applied art, it is respectfully submitted that all of Endo et al.'s and Shitamatsu et al.'s maps illustrate two-dimensional maps, three-dimensional maps or bird's-eye-view maps, i.e., neither of such references discloses or suggests a summary map derived from such two-dimensional maps, three-dimensional maps and bird's-eye-view maps (see, for example, the labeling applied to Endo et al.'s FIGS). And especially, Endo et al. and Shitamatsu et al. do not disclose or suggest the specific features (e.g., automatic display, linearizing/orthogonalizing, simplified intersections, etc.) of Applicant's disclosed and claimed invention.

For example, Endo et al. discloses that a user can select one of two-dimensional map bird's-eye view display or three-dimensional map bird's-eye view display. However, Endo et al. does not disclose to generate a summary road map,

or to search a facilities land mark determined by a facilities request to summarize the searched land marks, as in the present invention. Endo et al. also does not disclose to simplify the route by indicating the specialized lines, as shown in the Examiner's comment.

None of the other applied references cure such deficiencies. Accordingly, it is respectfully submitted that no combination of the applied references would have disclosed, or suggested, Applicant's disclosed and claimed invention.

In addition to the foregoing, the following additional remarks from Applicant's foreign representative are also submitted in support of traversal of the rejection and patentability of Applicant's claims.

Important points of independent claims 1, 3 and 9 as follows:

Claim 1: displaying a summary road map together with predetermined land marks.

Claim 3: displaying a summary road map of all a simplified route with broken lines.

Claim 9: displaying a summary road map from the current vehicle position to a next turning corner.

As mentioned above, the common matter of the three independent claims 1, 3 and 9 is that the summary road map to be displayed which further includes information convenient for users.

In general, a summary road map means a map summarized by reducing the amount of information. However, if information important for users is deleted, the function as a map is reduced. In the present invention, in order to achieve an arrangement where map information as whole is reduced and information important

for users is displayed by priority, the features described in the independent claims 1, 3 and 9 are given.

The cited references Endo (USP'552) and Shitamatsu (USP'860) do not disclose to display a summary road map. The Examiner says that the reference Endo discloses a navigation system including a map summarizing unit (63) (Endo et al, Fig.5), but Applicant could not find such a map summarizing unit. In the reference Endo, a map display method selection unit 63 (it is to be noted that this is not a map summarizing unit) selects one of a two-dimensional map display unit, a two-dimensional map bird's-eye view display unit 65 and a three-dimensional map bird's-eye view display unit. The reference Endo does not disclose to select a summary road map and to display it.

The reference Shitamatsu discloses that, when a parking lot is set within a zone, a route to the parking lot is searched together with land marks, but the reference Shitamatsu does not disclose a summary road map with land marks.

Therefore, the above features of the independent claims 1, 3 and 9 are not disclosed or suggested in the references.

As a result of all of the foregoing, it is respectfully submitted that the applied art (taken alone and in the Office Action combinations) would not support a '103 obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such '103 rejection, and express written allowance of all of the '103 rejected claims, are respectfully requested.

EXAMINER INVITED TO TELEPHONE

The Examiner is herein invited to telephone the undersigned attorneys at the local Washington, D.C. area telephone number of 703/312-6600 for discussing any Examiner's Amendments or other suggested actions for accelerating prosecution and moving the present application to allowance.

RESERVATION OF RIGHTS

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer. That is, any above statements, or any present amendment or cancellation of claims (all made without prejudice or disclaimer), should not be taken as an indication or admission that any objection/rejection was valid, or as a disclaimer of any scope or subject matter. Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, i.e., Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are now in condition for allowance.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR '1.136. Authorization is herein given to charge any shortage in the fees, including extension of time fees and excess claim fees, to Deposit Account No. 01-2135 (Case No. 500.43576X00) and please credit any excess fees to such deposit account.

Based upon all of the foregoing, allowance of all presently-pending claims is respectfully requested.

Respectfully submitted,

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